GROWERTALKS

Features

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The Pioneers Who Helped Shape Today's Growing Media Industry

Dr. Brian E. Jackson

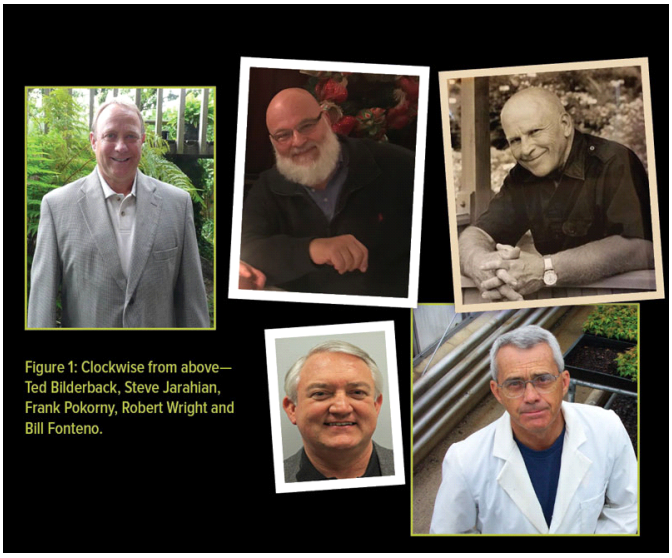


Figure 1: Clockwise from above—Ted Bilderback, Steve Jarahian, Frank Pokorny, Robert Wright and Bill Fonteno.

A guest column seemed to be a fitting conclusion to this history series, which has celebrated 125 years of innovation in growing media and container plant production. As such, this last article is personal: A tribute to some of the individuals who not only contributed to the early works of soilless growing media, but who've been mentors to me in my career, as well as numerous others. While this column is "my perspective," I hope it may encourage you to celebrate those in your life who've positively impacted your career.

Dr. Bill Fonteno grew up in Texas and earned his Ph.D. at Texas A&M before coming to North Carolina State University in 1976. In the early 1980s, he co-founded the Horticultural Substrates Laboratory with fellow colleagues Ted Bilderback, Paul Nelson and Stu Warren.

Bill has served as the Technical Advisor for the Mulch & Soil Council for decades and was instrumental in developing their quality program for all consumer potting soils and mulches sold in the U.S. Bill revolutionized how we measure substrate physical properties with the creation of the NCSU Porometer, and he was integral in the development of other analytical techniques and models that can measure and predict the physical properties of substrates.

Bill advised dozens of graduate students, traveled the world solving substrate-related problems and ran an international consulting company for 30 years. His greatest legacy, however, is the impact he's had on students and junior faculty—none more than me. From my arrival to NC State in 2009, Bill started as my mentor, but soon became my closest friend and ally. Together we embarked on 13 incredible years of discovery and graduate student training until July 2021 when he handed me the reigns to the program upon his retirement. Even in his retirement, he remains my trusted confidant and friend.

Dr. Robert Wright grew up in Tennessee and earned his Ph.D. at Purdue University before joining the faculty at Virginia Tech University in 1973. Dr. Wright's contributions to horticulture were numerous over his 36-year career, including the development of the "Virginia Tech Pour-Through Method" in the 1980s and research on processed pine trees (wood) as a substrate in 2004—a project I worked on for my Ph.D. under his guidance after completing my M.S. Degree at Auburn under his daughter Dr. Amy Wright.


Figure 2: Dr. Robert Wright of Virginia Tech University

Robert always reminded me to "THINK!" which was reaffirmed daily thanks to the printed sign he hung in the greenhouse. His dedication and focused vision guided me to be a better scientist and person. Our mountain hikes, autumn afternoons raking leaves and "talking shop," and the occasional indulgence of "blueberry Bettys" in the campus dining hall are all memories to be cherished forever. After graduation, my career at NCSU started on July 1, 2009, which overlapped with his retirement on the same day. "Passing the torch," he said.

Dr. Ted Bilderback grew up in Kansas and earned his Ph.D. at Kansas State before joining NC State University in 1977. He retired in 2014 after 37 years of dedicated service, ending his tenure as the Director of the JC Raulston Arboretum (2009-2014). His teaching, extension and research outcomes included the advising of 24 graduate students, over 500 research and extension articles, and the respect of nurserymen across the entire southeastern U.S. Ted's research on pine bark substrates (processing, aging, diagnostics, etc.) over three decades provided growers and bark suppliers with timely guidance and support.

He also investigated numerous other substrate alternatives, as well as developed a simple technique for growers to measure substrate physical properties using plastic bottles! Evidence of Ted's genuine wit, his catchy article titles remain classics today, including "Healthy Substrates Need Physicals, Too," "Bark and Roll Over" and "More Bark—Less Bite."


Figure 3: Mentorship in action.

Steve Jarahian grew up in Atlanta and studied horticulture at the University of Georgia. His nearly five-decade career began working with Metro Mix (1975-1980) followed by a long tenure at Fafard in Anderson, South Carolina (1980–2008). Among his many impactful achievements, he helped to pioneer custom mixes for greenhouse crops (example: Fafard 4P) and was heavily involved in pine bark development and use in mixes.

Steve's career has continued with Oldcastle (2009 – present) as Director of Technical Services. On a personal level, what makes Steve an industry legend is his willingness to educate and mentor young professionals. I'm a product of his mentorship, which began with our first encounter at the Southeast Greenhouse Conference (RIP) in 2007 when I was a graduate student researching wood substrates. Now 20 years later, he remains a mentor and friend. Aside from his vast network and knowledge

(and his love of antique cars), many folks at industry trade shows likely know him for his jolly smile and for the sweet treats he often shares from the Sweetery, a bakery he and his wife own.

Dr. Frank Pokorny (1930-2017) was a professor in the Department of Horticulture at the University of Georgia and is considered by some to be the “Father of Pine Bark Substrates.” Dr. Pokorny worked for a quarter of a century (retired in 1996) on various aspects of processing, handling and using pine bark substrates in nursery production. As a student studying all things substrates, I spent years reading and referencing his many works.

On December 22, 2014, Drs. Fonteno, Bilderback and I traveled to Athens, Georgia, to visit with Dr. Pokorny. While enjoying pizza and beer, the four of us “talked bark” for hours and shared decades of stories. I learned during this visit that Dr. Pokorny was a hero beyond the bark piles, thanks to his service as a captain in the U.S. Air Force during the Korean War. Meeting Dr. Pokorny remains one of the highlights of my professional career.

Two other individuals to whom I’m indebted for their mentorship are Dr. Charles Gilliam (1952–2023), who was a distinguished professor at Auburn University and spearheaded early research (~2005) on wood substrates made from whole pine trees (Wholetree). He and his wife Gail were like parents to me during my time as a graduate student at Auburn, for which I remain grateful.

Marty Gottlieb has been active in the growing media industry for more than five decades and has been involved with the commercial adoption of industry-changing products and practices, including “Sunshine Mix” and the transition to palletized bales of peat and growing media in the 1980s (Lambert Peat). Marty is also a walking encyclopedia of historical industry knowledge, a mutually shared passion of mine. **GT**

Dr. Brian E. Jackson is a Professor and Director of the Horticultural Substrates Laboratory at NC State University. Brian can be reached at Brian_Jackson@ncsu.edu.